

Flight Scientist Report
Tuesday 03/29/2022 ACTIVATE RF148

Flight Type: Process Study Flight

Flight Route:

Special Notes: Second of two flights to mostly re-trace the first flight but fitting in Falcon 'mini-walls' where stacked level legs are conducted to help get data in the same vertical column.

King Air

Pilot report (Wusk):

Second joint flight of a two-sortie day. KLFI ATLIC ZIBUT 3655N07034W WEBBB FISSH DARTT KLFI. 4 sondes. Crew was Coldsnow, Wusk, Singler.

Flight scientist report (Shingler):

KLFI ATLIC ZIBUT 36.92N/70.57W WEBBB FISSH DARTT KLFI

Plan is to almost repeat the track from RF147 but for the HU25 to do mini walls along the money leg. First wall was right after the eastern point turn and second wall was just before WEBBB. Coordination worked well this flight. RF148 looked similar in cloud scene to RF147.

4 SONDES

WALL1

WALL2

LYNUS

WICKE

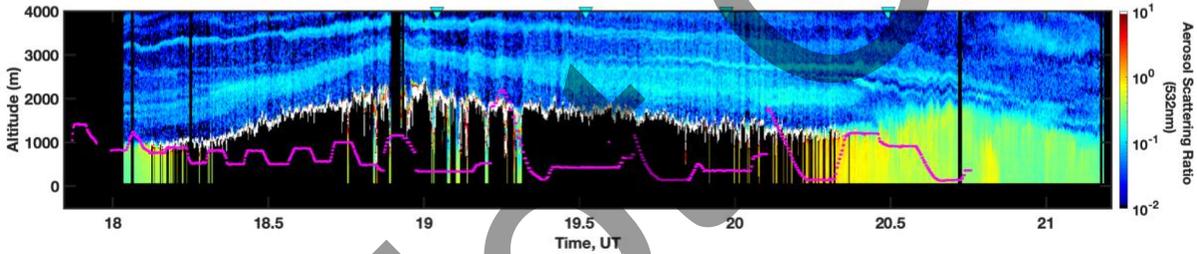
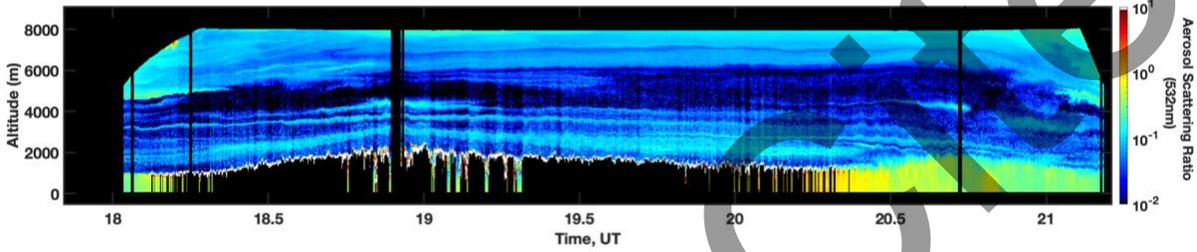
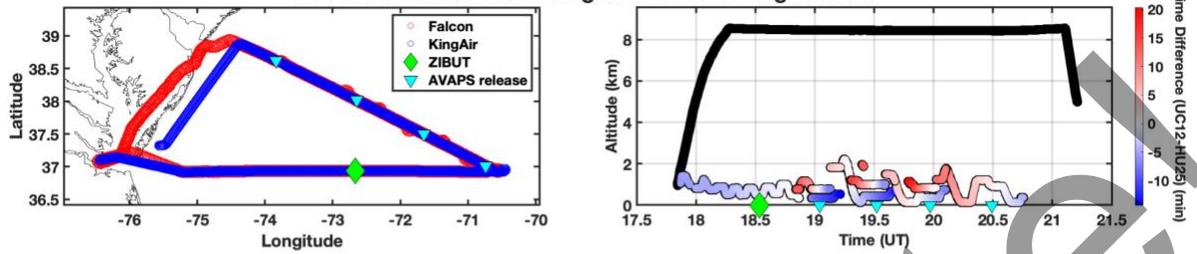
Falcon

Pilot report (Slover):

ACTIVATE cold air outbreak flight flown counter-clockwise around W-386 from KLFI - ATLIC - ZIBUT - N3655/W07034 - WEBBB - FISSH - ZIZZI - RADDs - JAMIE - KLFI. From ATLIC - ZIBUT - N3655/W07034, BCB/ACB sampling was done whole time. On N3655/W07034 - FISSH, three "mini-walls" were flown. First one just west of N3655/W07034, second just east of WEBBB and third centered near LYNUS. High altitude strong westerly winds over 100 kts made coincidental flight challenging, but with the extra fuel and three mini-walls, coincidence was well maintained. A military UAS in the W-386 "D" area between FISSH and DARTT drove HU-25 to decide to fly low over land while UC-12 flew just offshore.

Flight scientist report ():

20220329 - ACTIVATE - KingAir and Falcon flight tracks



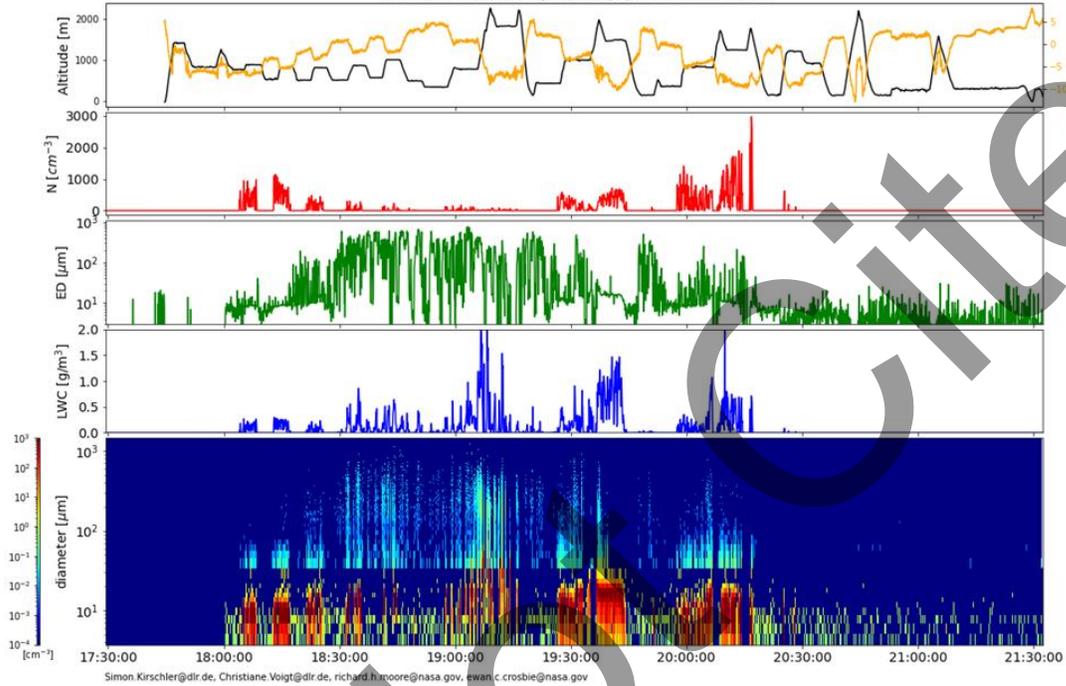
Quicklook ACTIVATE Cloud Probes (FCDP & 2DS) Quicklook

preliminary data, only for quicklook use

Simon Kirschler, Christiane Voigt, Richard Moore, Ewan Crosbie



Cloud Probes (FCDP & 2DS) Quicklook 29/03/2022 17:29-17:21:32:27

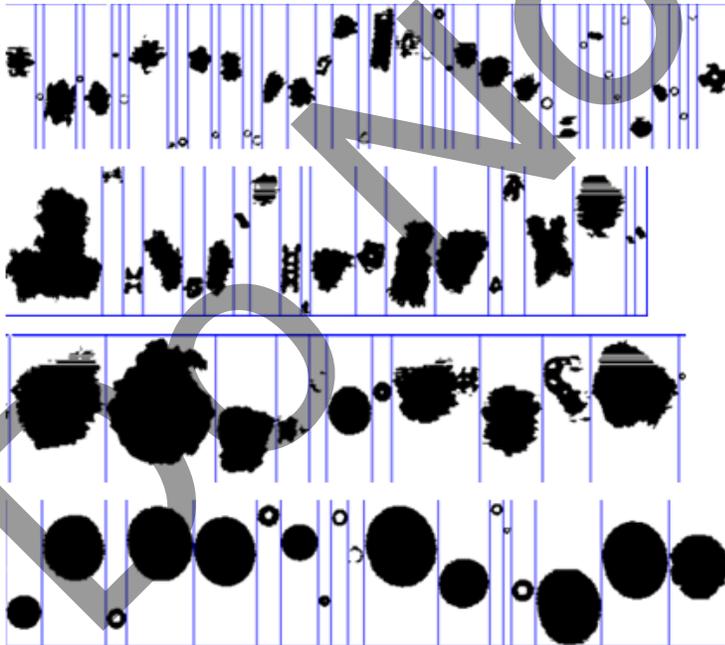
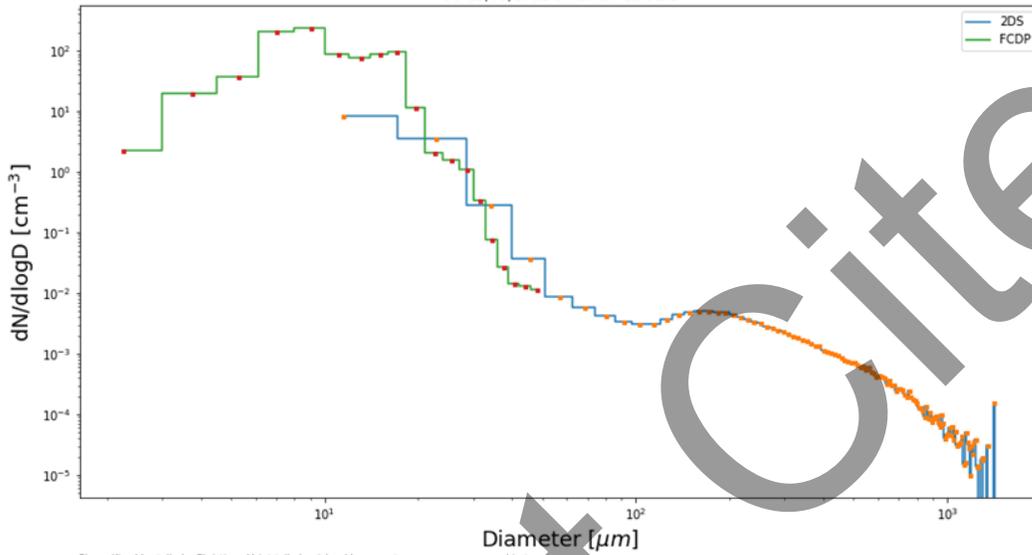


PSD ACTIVATE

preliminary data, only for quicklook use
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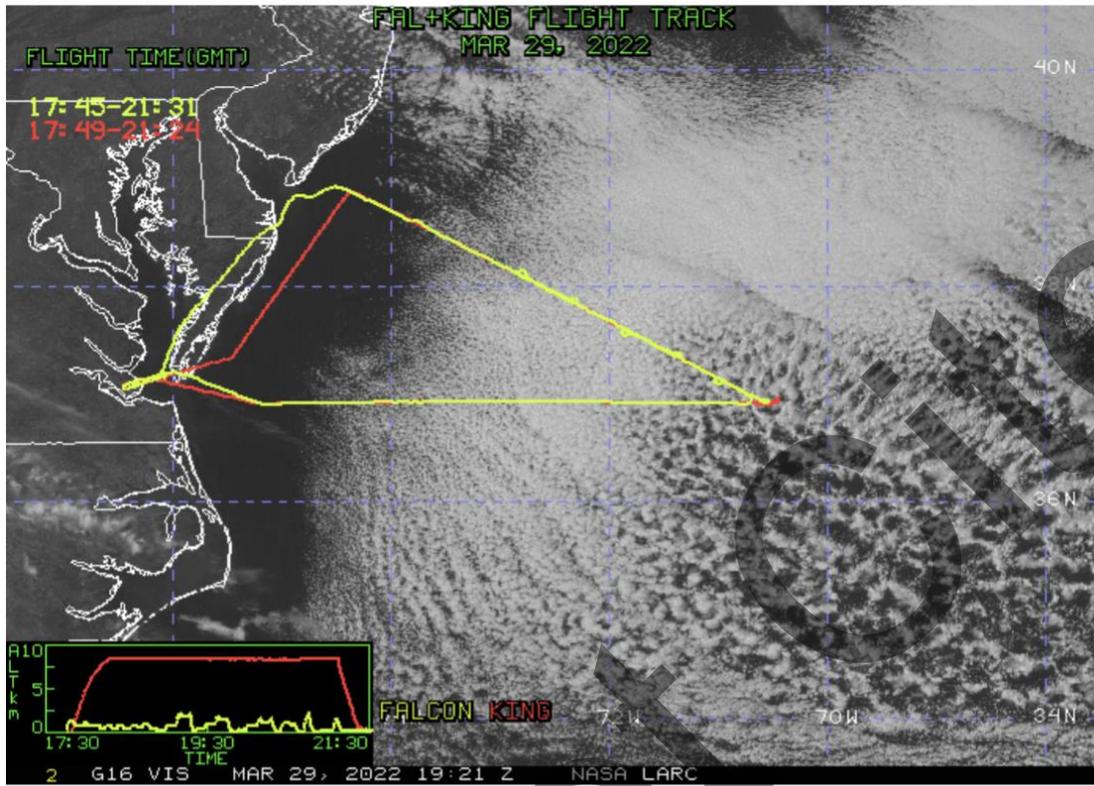


PSD 29/03/2022 17:29:17-21:32:27

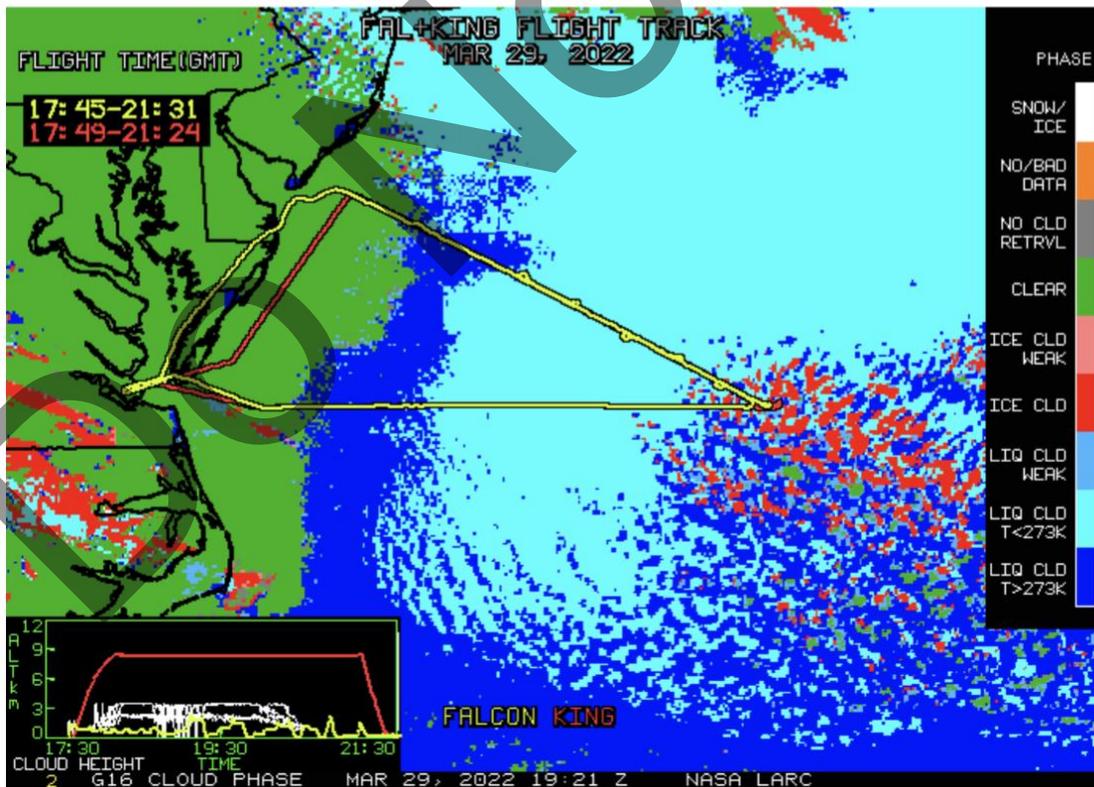


Mixed phase clouds with Precip.

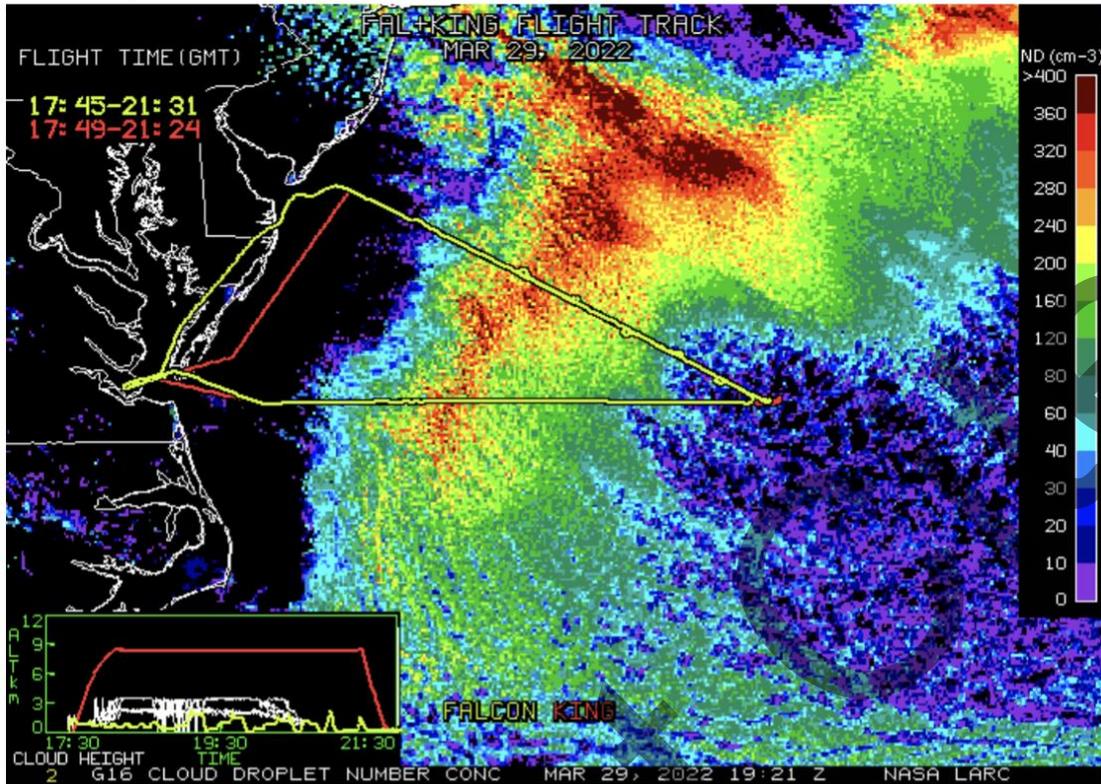
NASA-LaRC Clouds Group GOES-16 Quicklook Images for Flight 148, 19:21 UTC Mar 29, 2022
Visible Image



Cloud Phase



Cloud Droplet Number Concentration (cm-3)



Cloud-Top Height (Kft-ASL)

